

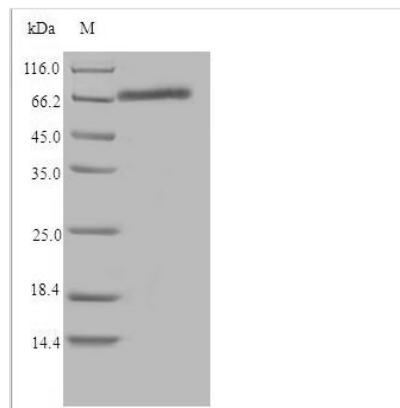


Recombinant Rat Cytochrome P450 1B1(Cyp1b1)

Product Code	CSB-EP731067RA
Relevance	<p>Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, retinoid and xenobiotics. Preferentially oxidizes 17beta-estradiol to the carcinogenic 4-hydroxy derivative, and a variety of procarcinogenic compounds to their activated forms, including polycyclic aromatic hydrocarbons. Promotes angiogenesis by removing cellular oxygenation products, thereby decreasing oxidative stress, release of antiangiogenic factor THBS2, then allowing endothelial cells migration, cell adhesion and capillary morphogenesis. These changes are concomitant with the endothelial nitric oxide synthase activity and nitric oxide synthesis. Plays an important role in the regulation of perivascular cell proliferation, migration, and survival through modulation of the intracellular oxidative state and NF-kappa-B expression and/or activity, during angiogenesis. Contributes to oxidative homeostasis and ultrastructural organization and function of trabecular meshwork tissue through modulation of POSTN expression.</p>
Storage	<p>The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.</p>
Uniprot No.	Q64678
Storage Buffer	Tris-based buffer,50% glycerol
Alias	CYPIB1 Cytochrome P450RAP
Product Type	Recombinant Protein
Species	Rattus norvegicus (Rat)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	<p>MATSLSADSPQQLSSLSTQQTILLLLVSVLAIVHLGQWLLRQWRRKPWSSPPG PFPWPLIGNAASVGRASHLYFARLARRYGDVFQIRLGSCPVVVLNGESAIHQ LVQQGGVFADRPPFASFRVVS GGRSLAFGHYSERWKERRRAAYGTMRAFST RHPRSRGLLEGHALGEARELVAVLVRRRCAGGACLDPTQPIIVAVANVMSAVCF GCRYNHDDAEFLELLSHNEEFGRTVGAGSLVDVMPWLQLFPNPVRTIFREFE QINRNFSNFVLDKFLRHRESLVPGAAPRDMMDAFILSAEKKATGDPGDSPSGL DLEDVPATITDIFGASQDTLSTALLWLLILFTRYPDVQARVQAELDQVVGRDRL PCMSDQPNLPYVMAFLYESMRFTSFLPVTLPHATTANTFVLGYYIPKNTVVFV NQWSVNHDPKWSNPEDFDPARFLDKDGFINKALASSVMIFSVGKRRRCIGEEL SKTLLFLFISILAHQCNFKANQNEPSNMSFSYGLSIKPKSFKIHVSLRESMKLLD SAVEKLQAEAEACQ</p>
Research Area	Metabolism
Source	E.coli



Gene Names	Cyp1b1
Expression Region	1-543aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	64.6kDa
Protein Description	Full Length

Image

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.